18. Solution: D

Let X_1 and X_2 denote the measurement errors of the less and more accurate instruments, respectively. If $N(\mu,\sigma)$ denotes a normal random variable with mean μ and standard deviation σ, then we are given X_1 is $N(0, 0.0056h)$, X_2 is $N(0, 0.0044h)$ and X_1, X_2 are independent. It follows that $Y = \frac{X_1 + X_2}{2}$ is $N\left(0, \sqrt{\frac{0.0056^2h^2 + 0.0044^2h^2}{4}}\right) = N(0, 0.00356h)$. Therefore, $P[-0.005h \le Y \le 0.005h] = P[Y \le 0.005h] - P[Y \le -0.005h] = P[Y \le 0.005h] - P[Y \ge 0.005h]$

$$= 2P[Y \le 0.005h] - 1 = 2P\left[Z \le \frac{0.005h}{0.00356h}\right] - 1 = 2P[Z \le 1.4] - 1 = 2(0.9192) - 1 = 0.84.$$